IMPLEMENTATION SCHEDULE

The Implementation Schedule that follows describes recovery task priorities, task numbers, task descriptions, duration of tasks, potential or participating responsible parties, total cost estimate and estimates for the next 5 years, if available, and comments. These tasks, when accomplished, will lead to recovery of bull trout in the coterminous United States as discussed in Chapter 1 of this Draft Bull Trout Recovery Plan.

Parties with authority, responsibility, or expressed interest to implement a specific recovery task are identified in the Implementation Schedule. Listing a responsible party does not imply that prior approval has been given or require that party to participate or expend any funds. However, willing participants will benefit by demonstrating that their budget submission or funding request is for a recovery task identified in an approved recovery plan, and is therefore part of a coordinated recovery effort to recover bull trout. In addition, section 7(a)(1) of the Endangered Species Act directs all Federal Agencies to use their authorities to further the purposes of the Act by implementing programs for the conservation of threatened or endangered species.

<u>Priority Number</u>: All priority 1 tasks are listed first, followed by priority 2 and priority 3 tasks.

Priority 1: All actions that must be taken to prevent extinction or to prevent the species from declining irreversibly in the foreseeable future.

Priority 2: All actions that must be taken to prevent a significant decline in species' population or habitat quality, or to prevent some other significant negative effect short of extinction.

Priority 3: All other actions necessary to provide for full recovery (or reclassification) of the species.

<u>Task Number and Task Description</u>: Recovery tasks as numbered in the recovery outline. Refer to the Narrative for task descriptions.

<u>Task Duration</u>: Expected number of years to complete the corresponding task. Study designs can incorporate more than one task, which when combined can reduce the time needed for task completion.

<u>Responsible or Participating Party</u>: The following organizations are those with responsibility or capability to fund, authorize, or carry out the corresponding recovery tasks.

Recovery Unit Team (RUT)

Federal Agencies:

USFWS U.S. Fish and Wildlife Service NMFS National Marine Fisheries Service

USCOE U.S. Corps of Engineers
USFS United States Forest Service
BIA Bureau of Indian Affairs

USEPA U.S. Environmental Protection Agency

USBOR U.S. Bureau of Reclamation

BLM U.S. Bureau of Land Management

NRCS U.S. Natural Resources Conservation Service

USGS U.S. Geologic Service

State Agencies:

ODFW Oregon Department of Fish and Wildlife

ODEQ Oregon Department of Environmental Quality

ODOF Oregon Department of Forestry

OWRD Oregon Water Resources Department

OSP Oregon State Police

Other Agencies:

CTWS Confederated Tribes of the Warm Springs Indian Reservation

CD Conservation Districts

UPRR Union Pacific Railroad

RUT Recovery Unit Team TMDLWG

Total Maximum Daily Load working group

WC Watershed Councils
ID Irrigation districts

DWC Deschutes Watershed Council
PGE Portland General Electric

ES Extension Service

COID Central Oregon Irrigation District
NGOs Non-governmental organizations

LCDC Oregon Land Conservation and Development Commission

DBLT Deschutes Basin Land Trust

DRC Deschutes Resources Conservancy

Bolded type indicates the agency or agencies that have the lead role for task implementation and coordination, though not necessarily sole responsibility.

<u>Cost estimates:</u> Cost estimates are rough approximations and are provided only for general guidance. Total costs are estimated for the duration of the task ad also itemized annually for the next five years. Total costs include estimates of expenditures by local, Tribal, State, and Federal governments and by private business and individuals. These costs are attributed to bull trout conservation but other aquatic species will also benefit. Cost estimates are not provided for tasks which are normal agency responsibilities under existing authorities.

An asterisk (*) in the total cost column indicates ongoing tasks that are currently being implemented as part of normal agency responsibilities under existing authorities. Because these tasks are not being done specifically or solely for bull trout conservation, they are not included in the cost estimates. Some of these efforts may be occurring at reduced funding levels and/or in only a small portion of the watershed.

Chapter 7 - Deschutes

	Implementation schedule for the Deschutes Recovery Unit										
	·		- 00		Cos	t Estima					
Task Priority		Responsible Parties	Total Costs	FY 1	FY 2	FY 3	FY 4	Comments			
2	1.2.3	Restore passage at Pelton/Round Butte, include monitoring strategy. PGE/WSPE proposal for experimental passage currently being drafted. If approved it would be implemented in 2006.	10 years	PGE/WSPE	*					Covered under existing programs *	
2	1.3.3	Increase or improve instream habitat by restoring recruitment of large woody debris or other means; mainstem Metolius.	25 years	USFS, landowners	250	10	10	10	10	Covered under existing programs; action needs funds due to USFS funding reductions	
2	6.2.1	Identify opportunities to incorporate bull trout recovery actions into hydrorelicensing projects in the Deschutes basin.	25 years	FWS, NMFS, ODFW	*					Covered under existing programs *	
2	7.1.1	Develop a Participation Plan to support implementation in the recovery unit.	25 years	RUT	*					Covered under existing programs *	
3	1.1.1	Stabilize roads, crossings, and other sources of sediment delivery.	25 years	RUT	200	60	60	60	60	Covered under existing programs	

Chapter 7 - Deschutes

	Implementation schedule for the Deschutes Recovery Unit										
			(years) Parties		Cos	t Estima					
Task Priority	Task Number	Task Description		Total Costs	FY 1	FY 2	FY 3	FY 4	Comments		
3	1.2.1	Screen water diversions and irrigation ditches.	10 years	ODFW	200	20	20	20	20	Covered under existing programs	
3	1.2.2	Restore connectivity and opportunities for migration by securing instream flows and/or water rights in Squaw Creek, Lake Creek, middle Deschutes, and lower Crooked.	25 years	ODFW, OWRD, ID, BOR, Private Irrigators	400	100	100	100	100	Covered under existing programs	
3	1.2.4	Restore passage at Opal Springs Dam, including monitoring strategy.	5 years	DVWD , BOR, FWS	*					Covered under existing programs *	
3	1.2.6	Restore passage to upper Squaw Creek, include a monitoring strategy.	10 years	ODFW, ID, Private Irrigators	100	UK	UK	UK	UK	Covered under existing programs	
3	1.3.1	Revegetate to restore shade and canopy, riparian cover, and native vegetation along mainstem lower Deschutes River, Crooked River and Squaw Creek.	25 years	BLM, DEQ, BIA, USFS, DRC, landowners	250	20	20	20	20	Covered under existing programs	

Chapter 7 - Deschutes

	Implementation schedule for the Deschutes Recovery Unit										
			Task		Cos	t Estima					
Task Priority	Task Number	Task Description	Duration (years)	Responsible Parties	Total Costs	FY 1	FY 2	FY 3	FY 4	Comments	
3	1.3.2	Reduce grazing impacts with current, proven technology, e.g., fencing, changes in timing and use of riparian pastures, offsite watering, and salting along the mainstem lower Deschutes River, Crooked River, and Squaw Creek.	25 years	BLM, DEQ, BIA, USFS, DRC, landowners	250	20	20	20	20	Covered under existing programs	
3	1.4.1	Review reservoir operational concerns such as water level manipulation, entrainment, etc., such as at Pelton Round-Butte. Provide operating recommendations through FERC relicensing process and/or Federal consultation.	25 years	PGE/WSPE	*					Covered under existing programs *	
3	1.4.2	Maintain instream flows downstream from dams and reservoirs, including Bowman Dam.	25 years	BOR, FWS, NMFS, ODFW	*					Covered under existing programs *	
3	1.4.3	Meet Tribal, State, and Federal water quality standards downstream from hydropower dam, Federal dams, and irrigation diversions, e.g., temperature, nitrogen, etc.	25 years	EPA/CTWS/ BIA, ID, DEQ, OWRD	*					Covered under existing programs *	

Chapter 7 - Deschutes

	Implementation schedule for the Deschutes Recovery Unit										
	Task Number		Task		Cos	t Estima					
Task Priority		Task Description	Duration (years)	Responsible Parties	Total Costs	FY 1	FY 2	FY 3	FY 4	Comments	
3	1.5.1	Complete watershed assessment for applicable streams, such as the Crooked River.	2 years	USFS, UDWC	100	25	25	25	25	Covered under existing programs	
1	1.5.2	Assess feasibility of reestablishing bull trout in the upper Deschutes core habitat, including an assessment of the capacity of habitat in the upper Deschutes to support self-sustaining populations of bull trout.	2 years	RUT, USFWS, BOR, ODFW	200	100	100	0	0	BOR consultation with FWS and NMFS is ongoing.	
3	1.6.1	Assess current risk of catastrophic fire to bull trout populations. Take corrective action to reduce risk of catastrophic fire to bull trout populations.	25 years	USFS	*					Covered under existing programs *	
3	3.1.1	Incorporate bull trout recovery actions into ODFW Deschutes basin fish management plans, the Oregon Plan for Salmon and Watersheds, and the Pacific Northwest Power Planning Council Subbasin plans. Request assistance with implementation of recovery strategies for bull trout through all three plans.	25 years	RUT/ODFW	*					Covered under existing programs *	

Chapter 7 - Deschutes

	Implementation schedule for the Deschutes Recovery Unit										
			Task		Cos	t Estima	its)				
Task Priority	Task Number	Task Description	Duration (years)	Responsible Parties	Total Costs	FY 1	FY 2	FY 3	FY 4	Comments	
3	3.1.2	Coordinate bull trout recovery with recovery efforts, management plans, etc. of other species, e.g., chinook salmon.	25 years	RUT	*					Covered under existing programs *	
3	4.1.1	Collect samples for genetic analysis to contribute to establishing a program to understand the genetic baseline and monitor genetic changes throughout the range of bull trout.	25 years	FWS	*					Covered under existing programs *	
3	4.1.2	Manage local populations (numbers and life forms) to maintain long-term viability.	25 years	FWS	*					Covered under existing programs *	
3	5.1.1	Coordinate bull trout recovery monitoring in the Deschutes Basin with the Oregon Plan for Salmon and Watersheds monitoring program.	25 years	ODFW	*					Covered under existing programs *	
3	5.4.1	Monitor for effects of fish pathogens on Oregon bull trout populations. Follow ODFW pathology department protocols (in development) for handling and disposition of bull trout mortalities, e.g., submission to ODFW fish pathology laboratories for disease assessment.	25 years	ODFW , RUT PGE, WSPE	*					Covered under existing programs *	

Chapter 7 - Deschutes

	Implementation schedule for the Deschutes Recovery Unit										
	Task Number		Task		Cos	t Estima					
Task Priority		Task Description	Duration (years)	Responsible Parties	Total Costs	FY 1	FY 2	FY 3	FY 4	Comments	
3	5.5.1	Conduct periodic surveys in potential habitat currently accessible to bull trout, but where bull trout status is unknown or recolonization is anticipated. This could include Link Creek and Mill Creek.	25 years	RUT	120	30	30	30	30	Covered under existing programs	
3	5.5.2	Determine movement and seasonality of use of different habitat types of adult and subadult migratory bull trout in multiple drainages, with emphasis on lakes, reservoirs, and mainstem rivers.	25 years	RUT	*					Covered under existing programs *	
3	6.1.1	Develop an outreach program to guide interaction with watershed councils and other entities in the basin. Disseminate information to a wide variety of interests groups and educational institutions via publications, world wide web, and presentations. Develop and implement processes to involve interested public by promoting public involvement in recovery projects, and providing for public review of conservation strategies.	4 years	RUT, DRC	20	5	5	5	5		

Chapter 7 - Deschutes

^{*} Ongoing tasks are currently being implemented as part of normal agency responsibilities that may benefit bull trout. Because these actions are not specifically or solely being done to address bull trout conservation, they are not included in the cost estimates. Some of these efforts may be occurring at reduced funding levels and / or in only a small portion of the watershed.